

# Development Progeria: Deconstructing the Decline of Manufacturing

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# The Malady

## Development Progeria

**Progeria** is genetic malfunction where children 3 years of age display the physical features of a person of 60.



# Development Progeria: What?

- A Low Income Economy exhibits the Industrial Sector share dynamics of High Income Mature Economies.
- Service sector share rises; the Industry and Manufacturing sector shares fall;
- Results: Slow Growth: low investment rate, slow job creation, slow poverty reduction.

# Development Progeria: Technically

Let  $M$ ,  $I$ ,  $S$  be the Share of Manufacturing, Industry, Services, respectively, in Total Value Added in a Low Income Developing Country. Development Progeria exists if within a given period:

$$\Delta M/M, \Delta I/I < 0;$$

$$\Delta S/S > 0$$

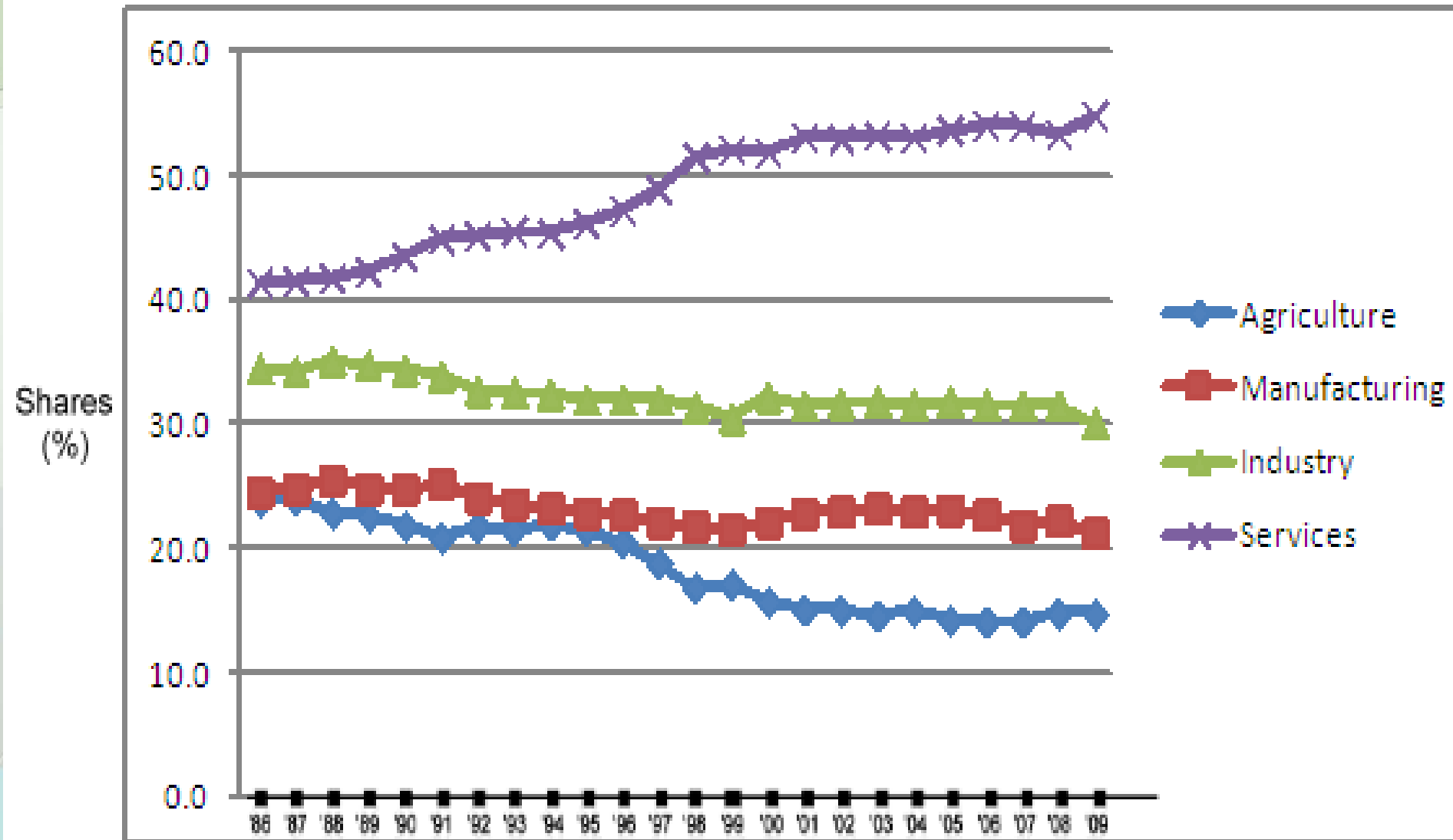


Figure 1. Trajectory of Philippine Value-Added by Industry as % Shares of GDP, 1986-2009

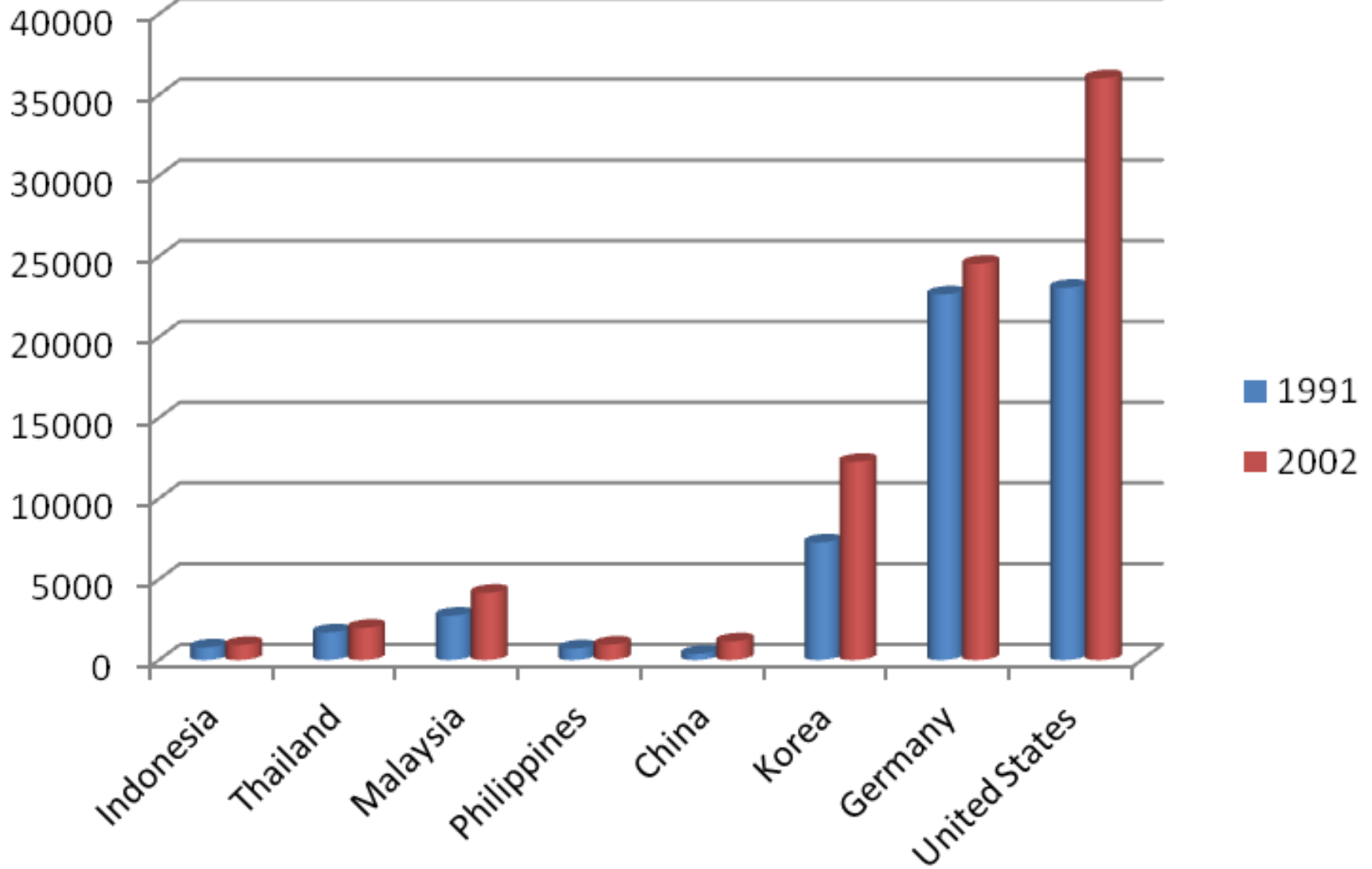


Figure 2. Per Capita Income (US\$), 1991 and 2002

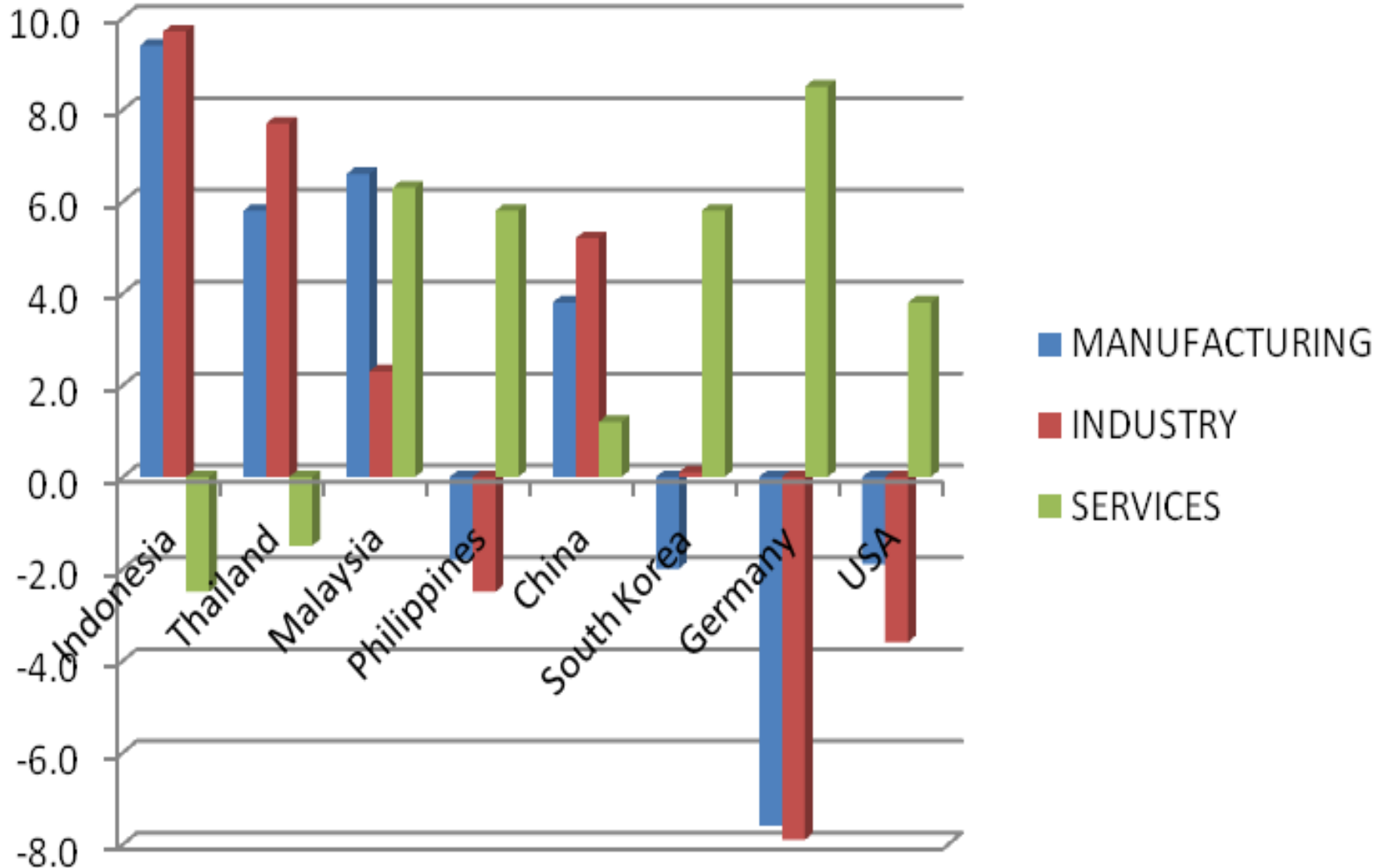


Figure 3. Change in % Industry Shares 1986 to 1996

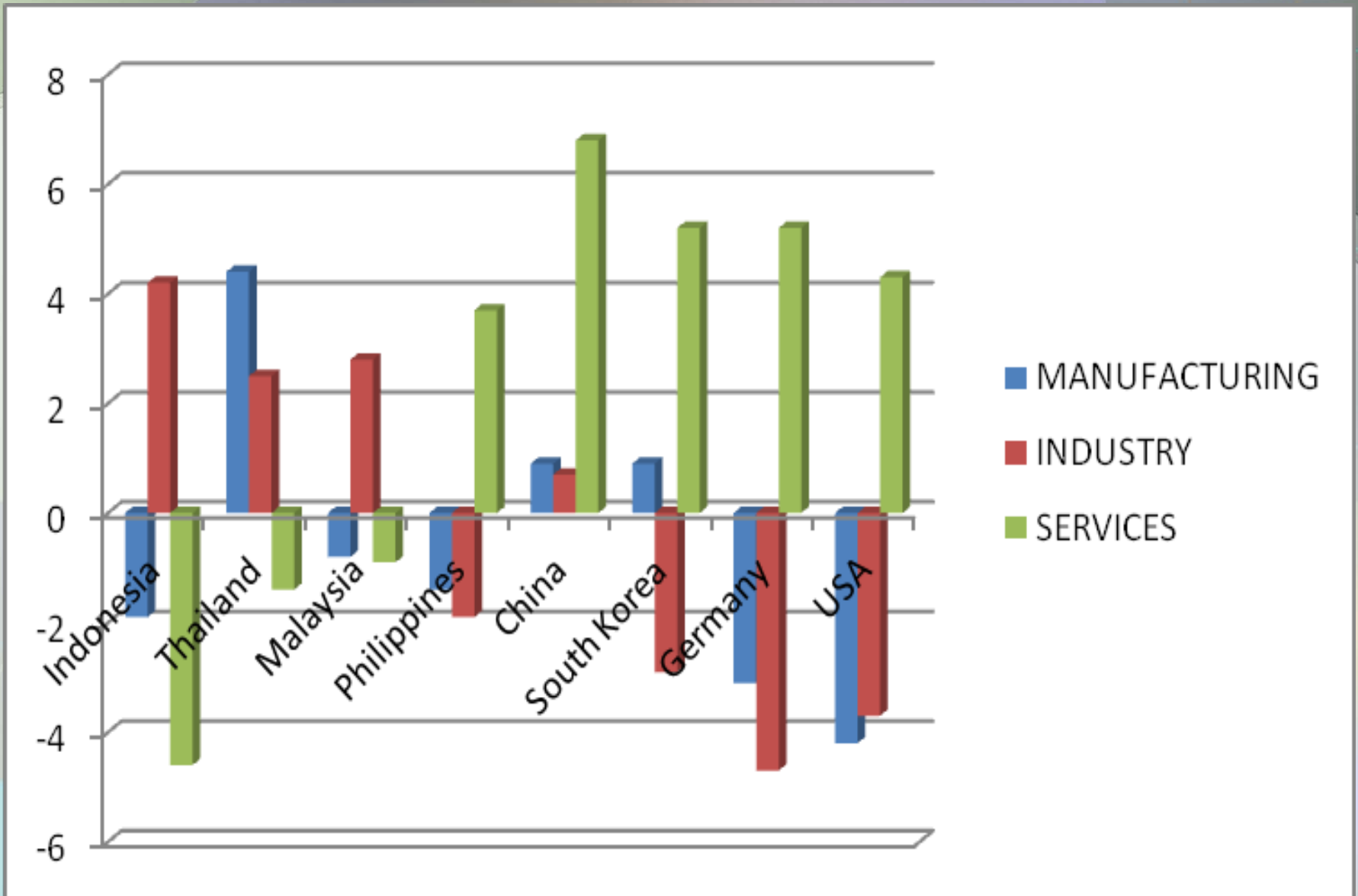


Figure 4. Change in % Industry Shares 1996 to 2009



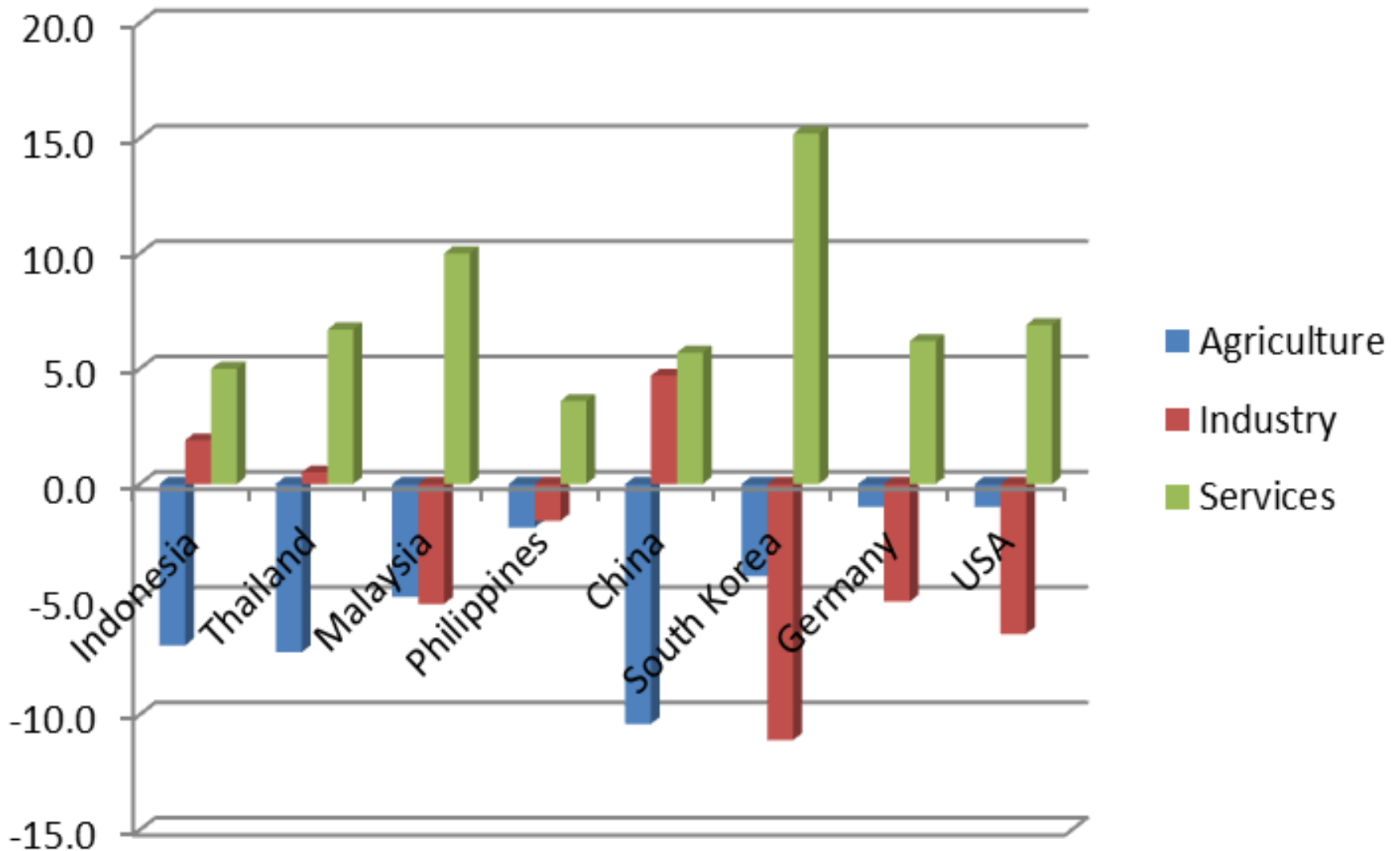


Figure 5. Change in Employment Share of Industry, 2000-2010

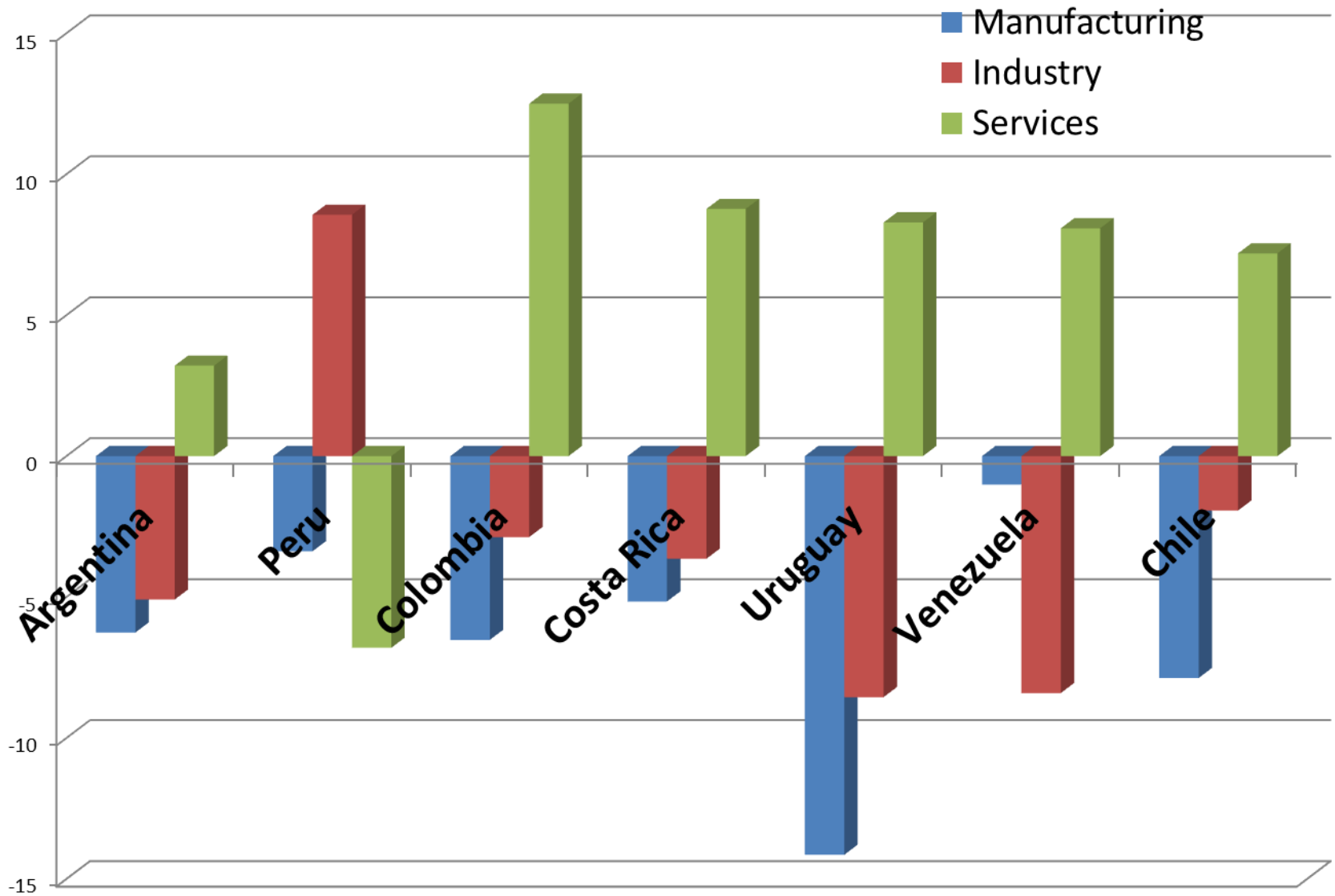


Figure 6. Development Progeria in Latin America, 1990-2010

# Genesis of Development Progeria

- Strong Peso: erodes the competitiveness of Tradables: including Agriculture (ginger and garlic), BPO
- Weak Institutions drive Investment from Manufacturing (Tradables) to Services (Non-Traded) Sectors (Rodrik, 2008).
- Emergence of low cost manufacturing countries: PRC, India, Bangla-Desh

# Implications of Dev Progeria

- **Slow long-term per capita income growth**
- **Low Investment Rate**
- **Slow job creation**
- **Slow poverty reduction**

# Investment, Growth, Poverty Reduction

- Cross country panel regression: Manufacturing and Service Shares in Value Added against Gross Fixed Capital Formation (GDCF % of GDP), Per Capita Income Growth and Poverty Incidence (WB WDI, 1991-2010).
- First pass regs, no contortions: all countries

# Gross fixed capital formation/GDP

Linear regression

Number of obs = **341**  
 F( 4, 336) = **16.61**  
 Prob > F = **0.0000**  
 R-squared = **0.2403**  
 Root MSE = **6.6533**

gfcf	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
Manuf_ValA~d	<b>.1964515</b>	<b>.0724038</b>	<b>2.71</b>	<b>0.007</b>	<b>.0540297</b>	<b>.3388733</b>
Serv_ValAd~d	<b>-.0926667</b>	<b>.0396427</b>	<b>-2.34</b>	<b>0.020</b>	<b>-.1706457</b>	<b>-.0146876</b>
bus_reg	<b>5.10428</b>	<b>.7257701</b>	<b>7.03</b>	<b>0.000</b>	<b>3.676654</b>	<b>6.531906</b>
gni	<b>.00048</b>	<b>.0002068</b>	<b>2.32</b>	<b>0.021</b>	<b>.0000732</b>	<b>.0008868</b>
_cons	<b>6.10532</b>	<b>2.293073</b>	<b>2.66</b>	<b>0.008</b>	<b>1.594732</b>	<b>10.61591</b>

# Per Capita Income Growth

Linear regression

Number of obs = 382  
 F( 4, 377) = 9.72  
 Prob > F = 0.0000  
 R-squared = 0.1449  
 Root MSE = 4.8725

percap_gr	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
Ind_ValAdded	.0739234	.0316961	2.33	0.020	.0116001	.1362468
Serv_ValAd~d	-.0842433	.0257391	-3.27	0.001	-.1348535	-.0336332
bus_reg	1.866647	.4936803	3.78	0.000	.8959348	2.837359
gni	-.0002222	.0001764	-1.26	0.209	-.0005691	.0001247
_cons	1.160171	1.68464	0.69	0.491	-2.152297	4.472639

## Poverty Incidence Growth

Linear regression

Number of obs = 78  
 F( 4, 73) = 7.57  
 Prob > F = 0.0000  
 R-squared = 0.2635  
 Root MSE = .44089

ln_pov_line	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
Manuf_ValA~d	-.0223079	.0083481	-2.67	0.009	-.0389455	-.0056702
Serv_ValAd~d	.0060031	.0049957	1.20	0.233	-.0039534	.0159595
bus_reg	-.1287399	.0959396	-1.34	0.184	-.3199473	.0624676
gni	-.0002224	.0000651	-3.42	0.001	-.0003521	-.0000926
_cons	4.343727	.282763	15.36	0.000	3.780181	4.907273



## Gross fixed capital formation/GDP

Linear regression

Number of obs = 341  
 F( 3, 337) = 25.16  
 Prob > F = 0.0000  
 R-squared = 0.2476  
 Root MSE = 6.6113

gfcf	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
ms_ratio	<b>11.56594</b>	<b>2.954835</b>	<b>3.91</b>	<b>0.000</b>	<b>5.7537</b>	<b>17.37819</b>
bus_reg	<b>4.723915</b>	<b>.6580875</b>	<b>7.18</b>	<b>0.000</b>	<b>3.429438</b>	<b>6.018391</b>
gni	<b>.0003402</b>	<b>.0001646</b>	<b>2.07</b>	<b>0.040</b>	<b>.0000164</b>	<b>.0006639</b>
_cons	<b>2.584375</b>	<b>2.35502</b>	<b>1.10</b>	<b>0.273</b>	<b>-2.048016</b>	<b>7.216767</b>

# Since 2013

- **Credo: DP is curable!**
- **What has happened since 2010?**

# Green Shoots in the Industry Front

## Growth Rates Industry Manufacturing & Services

	Sem. 1 2013	Sem. 2 2013	Sem. 1 2014	Q1 2014	Q2 2014
Industry	10.9	7.7	6.6	5.8	9.5
Manuf.	9.9	10.6	8.8	6.3	10.6
Services	7.2	7.2	6.4	10.0	9.1

- Manufacturing grew faster than Services in past three semesters

# Still the Playground of Speculators?

## Ratio of Portfolio to Direct Foreign Investment (2013)

	PERCENT
China	7.0
Emerging Markets Asia	19.0
Latin America	27.0
EM Europe	7.0
Africa and Middle East	27.0
Philippines	127.0

Proportion of portfolio to direct foreign investment  
= 127 vs. 19% in EM Asia

# Remedies

- **Competitive Exchange Rate: as China**
- **Raise Gov't Capital Outlay to 5% of GDP**
- **Celebrate Investment by:**
  - ❖ **Simplifying regulations as in Mining**
  - ❖ **Reducing electricity prices by procuring new baseload power plants**
  - ❖ **Allow efficiencies such as in agriculture**
  - ❖ **Broaden the tax base and reduce taxes. Go for uniform income tax**

# Reasons for Hope

- The new BSP dispensation more pragmatic
- Wider agreement on policy goal but not yet on instruments
- New PHL economy (BOP surplus; high GIR) means we can say “no” to purveyors of portfolio capital
- Wider acceptance of the mantra: “A weak peso leads to a strong economy.”

Thank You

**Mabuhay Kayo!!!!!!**

# Danger Points

- High power cost/Power rate spike
  - Dangerously low power reserve
- Still a **Consumption-led recovery**
- Not yet an Investment-led growth!
- **Boom-Bust Cycle** as long-term legacy:  
cannot sustain rapid growth



# Stubborn Legacies

- **Portfolio Investment** dominates Foreign Investment: \$3.7b versus \$1.5b **DFI** in 2012 the old familiar pattern
- **Investment Rate = Gross Fixed Capital Investment/GDP** is low: 19% of GDP despite higher Savings rate: 25%
- **Jobless growth**
  - Unemployment rate remains stubbornly high

# In the Service of the Strong Peso: Junctures

- 1985 and the Interest Rate Cure through JOBO Bills: shrunk the economy to fit the overvalued peso! Neutered the Cory recovery.
- 1995 and “Over my dead body!”: The BSP embraced peso appreciation and told Banks to borrow abroad; bust effectively neutered the Ramos recovery.
- 2013 Upgrades: Will the PNoy recovery be neutered by peso appreciation?

# The Lime Factory Parable

- Geo-7: a group of entrepreneurial scientists raised money to invest in lime production in Bohol in mid-1990,
- Decided to postpone and instead put capital in bubbly stock market; made quick abnormal paper profits; savvy!
- 1998: collapse of the bubble: lost capital
- Lime factory ditched: 10 jobs aborted.
- Why is the decline of M bad?

# Per Capita Income Growth

Linear regression

Number of obs = 364  
 F( 3, 360) = 4.22  
 Prob > F = 0.0060  
 R-squared = 0.0371  
 Root MSE = 5.2717

percap_gr	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
ms_ratio	3.485669	1.756061	1.98	0.048	.0322432	6.939095
bus_reg	.9940051	.5191653	1.91	0.056	-.0269727	2.014983
gni	-.0003939	.000154	-2.56	0.011	-.0006967	-.0000911
_cons	1.575998	1.871758	0.84	0.400	-2.104955	5.256952

## Poverty Incidence Growth

Linear regression

Number of obs = 78  
 F( 3, 74) = 10.59  
 Prob > F = 0.0000  
 R-squared = 0.2891  
 Root MSE = .43023

ln_pov_line	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
ms_ratio	-1.085194	.3443456	-3.15	0.002	-1.771318	-.3990707
bus_reg	-.1189202	.0794699	-1.50	0.139	-.2772675	.0394271
gni	-.0002218	.0000675	-3.29	0.002	-.0003563	-.0000873
_cons	4.606428	.3009403	15.31	0.000	4.006791	5.206064

# First Pass Results

- Manufacturing Share positive/significant for investment rate and for per capita income growth; negative/significant for poverty reduction; by contrast,
- Service Sector Share negative/significant for investment rate, income growth and poverty incidence;
- Manuf/Service Sector Share positive/significant for the Investment Rate, per capita income growth.

# Progeriacs and Jobless Growth

- Service Sector dominated by informal firms with low scale-up potential,
- Employment in the Service Sector: mostly low income, distress-coping, unstable
- GDP growth from asset price bubbles (PSEI 40% growth) create few jobs but lucky asset holders can afford caviar and Ferraris
- We must give Manufacturing and Tradables sectors breathing space.

**Maraming Salamat  
at  
Mabuhay Kayo**